DOCUMENT RESUME

ED 200 946 CS 006 040

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TITLE A Descriptive Study of the Characteristics of Miscue Focussed Verbal Interactions between Teacher and Student during Guided Oral Reading.
INSTITUTION Texas Univ., Austin. Dept. of Curriculum and Instruction.; Texas Univ., Austin. Research and Development Center for Teacher Education.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
PUB DATE Apr 81
NOTE 37p.; Paper presented at the Annual Meeting of the International Reading Association (26th, New Orleans, LA, April 27-May 1, 1981).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Classroom Communication; *Feedback; Grade 2; Interaction Process Analysis; *Miscue Analysis; *Oral Reading; Primary Education; Reading Ability; Reading Instruction; *Reading Research; Student Behavior; *Student Teacher Relationship; *Teacher Behavior

ABSTRACT

A study was conducted to describe the characteristics and effects of the verbal feedback offered by teachers to student miscues occurring during group oral reading instruction. Analyses were also made of the ways in which teachers varied feedback between students at different ability levels. The subjects were eight second grade teachers and their regular reading groups. Two teachers had one reading group each, four teachers had two reading groups, and two teachers had three reading groups, making a total of 16 reading groups. Each group was videotaped on four separate occasions. Miscue-focused interactions were coded using the FORMAS taxonomy. Guided oral reading was found to be a significant part of reading instruction. Teacher verbal feedback to miscues occurred with some frequency with both the high and the low ability groups. Good and poor readers were found to be significantly different in their miscue patterns and subsequent reaction strategies, and teachers were found to be significantly different in their verbal response patterns to the two groups. The findings can be interpreted in terms of a mutually adaptive cycle that serves to reinforce existing patterns of behavior between teacher and groups. (Author/RL)

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A Descriptive Study of the Characteristics of Miscue Focussed Verbal Interactions Between Teacher and Student During Guided Oral Reading

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Paper presented at the Annual Conference of the International Reading Association, New Orleans, 1981.

This study was supported in part by Contracts and Grants for the National Institute of Education to The University of Texas at Austin. The opinions expressed herein do not necessarily reflect the position or policy of the National Institute of Education and no official endorsement by that office should be inferred.

CS006840

A Descriptive Study of the Characteristics of Miscue Focussed Verbal Interactions Between Teacher and Student During Guided Oral Reading

Field-based research on the teaching of reading is in its infancy. What we know about what is going on in classrooms during reading instruction is based largely on anecdotal evidence and uncorroborated survey data. What we know about the effects of specific patterns of instruction on the ways in which children learn to read is even more obscure. The recurring calls for field-based research in reading to address these areas of concern (Farr & Weintraub, 1974, 1975; Carey, 1980) continue to emphasize the importance of "naturalistic settings" and "ecologically valid contexts" for the study of such phenomena. While recent work by such researchers as Anderson, Brophy and Evertson (1977), McDermott(1977), Durkin (1979), and Stallings (1980) offer some evidence that progress is being made, we, nevertheless, must regard ourselves as neophytes in a new realm of inquiry. The purpose of this paper will be to report one portion of the findings from an intensive field-based study of second grade reading instruction designed to explore the process of learning to read in the context of the classroom.

The principal focus for this portion of the study was on the nature, characteristics and effects of the verbal feedback offered by teachers to student miscues occurring during group oral reading instruction. The selection of oral reading as the focus for the study was based on a consideration of four factors. First, group oral reading instruction--as best as we can tell from survey reports--is a very common element in most primary reading programs (Austin & Morrison, 1963; Howlett & Weintraub, 1979). The topic of oral reading instruction, therefore, is one of practical concern.

Second, oral reading instruction has clear and well-defined task characteristics about which most teachers and students share a common understanding (Doyle, 1979). In this regard, the task of oral reading is highly amenable to classroom observation. Third, recent advances in the study of oral reading by Goodman (1967) and his associates (Goodman & Burke, 1972) point to the wealth of qualitative information imbedded in a student's oral reading performance. This qualitative information is likely indicative of a child's developing competence in reading as well as reflective of the instruction the child has received (Harste & Burke, 1977). Fourth, and finally, the conceptual framework for studying teacher feedback to oral reading proposed by Hoffman (1979) as well as the development and validation of an observation system for characterizing this feedback (Hoffman & Baker, 1980, 1981) provide a direct means for analyzing the verbal interactions that are associated with student miscues during oral reading instruction.

Background of Research into Feedback During Oral Reading

Overall, past research into teacher feedback during oral reading instruction has been infrequent, and limited in scope (Niles, 1980). In this section of the report the principal studies that have been conducted in this area will be reviewed, with the goal of highlighting some of the findings which are relevant to the current research.

Epstein and Lynch (1974) reported the results of a study comparing a five-step cueing strategy to "typical response patterns" used by teachers in offering feedback to student oral reading errors. The students had been selected randomly from a pool of educable mentally retarded children. Teachers taught groups of five students each in two oral reading lessons--first under a control condition, then a week later under an experimental condition using

the prescribed cueing strategy. During the control condition teachers were asked to make their "normal responses" when responding to pupil miscues. The pretest measure was the errors made during a student's oral reading turn. The posttest measure was the number of errors made by the student when re-reading the same story aloud to the researcher the next day. The performance of students was better under the experimental (prescribed cueing) condition in terms of accuracy on the posttest and the difference between pre- and posttest scores. The authors concluded that slightly retarded children learn more new words from teacher responses to miscues which are highly consistent and structured than when teachers use "the normal variety of cueing schemes."

Niles et al. (1976) conducted a study comparing the effects of an immediate-teacher-feedback condition to a no-verbal-feedback condition upon the oral reading miscues of fourth grade pupils. Each student subject read to the same randomly assigned preservice teacher for ten to fifteen minutes on each of four consecutive days in materials chosen by the teacher under one of the two experimental conditions. One group of subjects read under an "uninterrupted" condition, while the other group read under an "immediate interruption" condition where miscues were brought to a student's attention using a set of ten prescribed response patterns which were tied to specific types of miscues (e.g., student error = omission → teacher responses = "You skipped a word.") On the fifth day, all students read from the same story (fourth grade difficulty level). Reading performance for each student was calculated according to the Reading Miscue Inventory (Goodman & Burke, 1972). Results indicated that the miscues of students who had received immediate feedback were graphically and phonically more similar to the expected responses

and grammatically more acceptable than were miscues of students under the uninterrupted condition. Miscues of students under the experimental condition, however, changed the meaning of the text to a lesser degree. Scores of the uninterrupted group were also higher on the oral retellings. The authors concluded that teachers must prudently consider if and when and how teacher feedback should be provided during oral reading.

Terry and Cohen (1977) studied the effects of various prompting strategies of special education preservice teachers on the response patterns of a group of "mildly handicapped low level" readers. Ten categories of teacher prompts and two categories of pupil responses to prompts were used to code observed teacher and pupil response behaviors. The preservice teachers had instruction through a prompting module which recommended responding only to miscues that changed the text's meaning, using structural analysis, attention, pattern, phonics, or context prompts. The authors of the observation system (OROS) used in this study (Brady, Lynch & Cohen, 1976) classified four of the teacher prompt categories as look-prompts, four as social prompts, and two as meaning prompts. The results indicated that the percentage of time the five recommended prompts were given by teachers differed relative to the reader's ability level, with the higher readers receiving a greater number of attention prompts and the lower ones more context and pattern prompts. It was also found that the success a child had with decoding a word immediately following a prompt varied according to the child's reading level. The better readers decoded words more successfully with a wider variety of teacher prompts.

Allington (1978) examined the interruption behaviors of twenty volunteer primary grade teachers from three school districts to clarify

whether or not the miscues of "good" and "poor" readers were responded to differently. Teacher interruption behaviors were categorized according to "point" and "direction" of interruption. The point of interruption categories included: no interruption, at error, and two post error categories. The direction of interruption categories included graphemic, phonemic, semantic, and syntactic teacher pronunciation. It was reported, based on an analysis of tape-recorded teacher interactions with their reading groups, that (1) poor readers were more likely to be interrupted at the point of error than good readers; (2) regardless of grade level or "place" in the learning to read process, the most common type of interruption behavior was for the teacher to provide the word; and (3) the teacher tended to cue poor readers to graphemic cues slightly more than they did good readers.

Hoffman, O'Neal, and Baker (1981) reported findings from a study comparing patterns of verbal feedback by inservice and preservice teachers offered in response to students reading orally from two different difficulty levels of text. The subjects were teacher pupil dyads. The pupils were elementary aged students enrolled in a summer reading program. The teachers were experienced classroom teachers enrolled in a graduate methods course and undergraduate education majors enrolled in their first methods class. Pupils were randomly assigned to teachers to form instructional dyads. The students read to their teacher orally for about ten minutes from two different difficulty levels of text. Overall, the experienced and inexperienced teachers were remarkably similar in their choice of response patterns. Both groups of teachers, for example, were more likely to make an overt response to the miscues which substantially affected text meaning than those which changed meaning only slightly. In terms of the timing of

feedback, teachers as a rule did not wait long to give a response. Over 75% of the responses were initiated in less than three seconds following a student miscue. When teachers did respond, their feedback was divided fairly evenly between giving the student the text word (terminal feedback) and attempting to have the student identify the word (sustaining feedback). There was a significant trend toward more terminal feedback when students were reading from the more difficult material. The pattern of sustaining feedback seemed to indicate that contextually oriented prompts took less time and were more likely to lead to student identification of miscues than grapho-phonically oriented prompts. The authors caution against generalizing from the findings of this study to the classroom situation due to the contrived experimental setting and dyadic context for interactions.

Corporately, the findings from these studies suggest that feedback during oral reading instruction can have a significant impact on student performance and that teachers may differentiate their feedback strategies based on certain student characteristics (e.g., ability). Unfortunately, due to numerous methodological limitations, these studies do not provide much in the way of specific information about specific feedback patterns and pupil performance, nor, with the exception of Allington's research, are the patterns generalizable in clear ways to practicing teachers in regular classrooms. It was out of this concern for increased specificity and generalizability that this present study was initiated.

The goals of this study were three-fold:

(1) To characterize teacher verbal feedback to oral reading miscues in terms of distributive patterns of teacher behavior.

(2) To determine the ways in which teachers may or may not consistently vary feedback between students in different ability groups.

(3) To infer toward possible relationships between teacher feedback patterns and student performance characteristics.

Methods and Procedures

Subjects

The unit of analysis for this study was the reading group. There were eight teachers included in the study. Two teachers had one reading group each, four teachers had two reading groups, and two teachers had three reading groups, making a total of 16 reading groups. While each teacher, as is normally the case, divided their students into reading groups according to the reading ability of the individual student, students had been previously assigned to classes based to some degree on their reading ability. This made it possible for a low reading group in one class to be made up of better readers than a high reading group in another class. For this reason reading groups were classified as high or low ability on the basis of the average of the individual's pre/post reading achievement test. The 16 reading groups were divided into two groups of eight reading groups with the highest achieving groups being in Group 1 and the low achieving groups being in Group 2. The fact that teachers were in some instances unevenly represented across groups, creates certain problems for analysis which will be discussed later.

Data Collection and Coding

The data for this study comes from videotaped reading groups. These reading groups were videotaped as a part of a larger study designed to allow an indepth examination of reading instruction in the field. Each of the nine teachers in the original study was videotaped on four separate occasions

while guiding their reading groups. One of the teachers did not have a sufficient amount of guided oral reading to be included in the study. The videotapes were coded using the FORMAS taxonomy (Hoffman & Baker, 1981). Following this system, each miscue is examined across five major clusters of behavior: (I) miscue characteristics, (II) reaction, (III) teacher verbal feedback, (IV) other student verbal feedback, and (V) miscue resolution (see Figure 1 for breakdown of each cluster). Coders were trained and levels of agreement monitored using procedures established by Hoffman, Gardner and Clements (1980).

Data Analysis

There are many analyses possible given the complexities of FORMAS. The analyses used for this paper were carried out in three phases. In each phase the high versus low reading groups were included as a factor. The dependent variable used in each of the analyses described below is miscue rate for each category. This was calculated for each group by dividing the number of miscues made in a category by the total number of words read by that group and then multiplying by 100.

Phase I. In Phase I the major categories in each FORMAS cluster were analyzed separately (cluster IV is not included in this paper since few instances of other student feedback were observed). In Cluster I a two-way between-within analysis of variance was run with ability groups as a factor and the miscue categories as the within group factor. In Cluster II a similar analysis was run for reaction categories. Repetition miscues were omitted from the analysis because they tend to artificially inflate the category of immediate self-correction. In Cluster III feedback categories replaced reaction categories and in Cluster V resolution categories were analyzed. Immediate self-corrections were omitted from the latter two

analyses since they offered no opportunity for teacher feedback.

Phase II. In this phase the subcategories of Clusters I and III were further analyzed. For Cluster I this implied two analyses. In the first there were three factors:(1)reading ability,(2)the miscue categories(insertions, omissions, substitutions), and (3) degree of meaning change. The second analysis also had three factors: (1) reading ability, (2) miscue categories (substitutions and mispronunciations), and (3) grapho-phonic similarity.

There were three analyses in this phase for Cluster III. First, sustaining and terminal feedback were broken down for timing of feedback. Second, sustaining and terminal feedback were broken down in terms of the point of feedback. The third analysis looked only at sustaining feedback which was broken down into the form of the feedback. As before, reading ability was included each time as a factor.

Phase III. In this phase two different clusters were included in the same analysis in the order that they occurred in time. This means that the analysis discussed above for Clusters II, III, and V were rerun, only this time including miscue categories and subcategories as factors in the analysis. Clusters III and V were then reanalyzed including reaction categories as a factor with repetitions omitted from the analysis and Cluster V was reanalyzed including feedback and its subcategories as factors with repetition and self-correction omitted from the analysis.

Limitations. There are two problems inherent in this analysis. It has already been mentioned that there is a confound between the ability grouping used and teachers. The seriousness of this problem should not be underestimated, but it was felt that the alternative which was to make teacher/class the unit of analysis would not improve the interpretability

of the findings since some of the teachers did have groups which spanned the high to low ability boundary. The results of this analysis which concern reading ability must be interpreted with some caution.

The second problem of these analyses has to do with the dependent variable. The miscue rate measures used is in reality a proportion. Proportions are not constant interval variables nor are they normally distributed, therefore, they do not meet the required assumptions for an analysis of variance. While there are transformations appropriate for proportion data (e.g., arc sine), the consequence of not transforming is a loss of power in most instances. It will be seen shortly that any loss in power is not crucial to the hypothesis tested. Further, these types of transformations are difficult to use in this case because of the occurrence of zeroes in the data set. In all of the transformations a zero must be made into an arbitrarily large negative number. If this were done, it would be very difficult to interpret analyses which contained these proportions.

Results and Discussion

Of the nine teachers videotaped in the original sample, teacher guided oral reading was found to be present with sixteen different reading groups, or 63% of the total number observed. While the total number of reading sessions in which oral reading occurred was equal for the high and low groups, the total amount of time spent in actual group instruction was significantly different for the high (331 minutes) and the low (270 minutes). Within these reading groups, approximately 68% of the time for both the high and low readers was spent interacting directly with the story. The low groups spent about 66% of their time reading aloud, 15% discussing the story, and 11% receiving verbal feedback to miscues. The high groups spent 52% of

their time reading, 37% discussing the stories and 9% receiving verbal feedback to miscues.

Approximately 1,000 miscues were observed and coded. There was a statistically significant difference in reading accuracy between ability groups ($p < .001$) with students in the low reading groups demonstrating a higher miscue rate (11 miscues per 100 words) than the students in the high reading groups (5 miscues per 100 words). Reading rate in words per minute was also significantly greater in the high reading groups. The overall correlation between group miscue rate and reading achievement was $r = -.75$.

These early findings suggest first that oral reading is indeed a significant part of reading instruction at the second grade level. Second, that while poor readers spend a greater portion of their reading group time reading aloud, they have less time to begin with, are reading slower, and making many more errors than the good readers. Third, that teacher verbal feedabck to miscues occupies a significant portion of the time spent in guided oral reading.

The findings from the analyses of the miscue focussed interaction will be reported in four major sections which correspond directly to four of the five clusters delineated in the FORMAS taxonomy: (1) miscue characteristics, (2) student reactions, (3) teacher verbal feedback, and (4) miscue resolution. There were so few instances of "other student feedback" to miscues that the data from this cluster was eliminated from consideration.

Miscue Characteristics

There was a statistically significant difference among the miscue types [$F(5,70) = 23.5204$, $p < .01$] across all students. This indicates that at least six of the miscue categories (i.e., insertions, omissions, substitutions, mispronunciations, hesitations, and repetitions) have different characteristic rates of occurrence. There were so few instances of "call for help" miscues that this category identified in the FORMAS taxonomy was dropped from consideration. There was also an ability by miscue type interaction [$F(5,70) = 11.8138$, $p < .01$], indicating that good and poor groups

differed with respect to the rate of certain kinds of miscues. The rate for substitution miscues was approximately equal for the two ability groups. The readers in the poor groups were more likely than those in the good groups to make hesitation and mispronunciation type miscues while the readers in the good groups were more likely than those in the poor to make repetitions, omissions, and insertions.

Substitutions, mispronunciations, omissions, and insertions were further analyzed for the degree to which the miscues affected the meaning of the text being read. There was an interaction between ability groups and meaning change [$F(1,14) = 20.96$, $p < .01$], with high readers found to be making more low meaning change miscues and low readers making more high meaning change miscues. This difference replicates findings from numerous other studies which have compared high and low ability readers using miscue analysis techniques.

Substitutions and mispronunciations were analyzed for the degree of grapho-phonic similarity between expected and observed responses. There was a significant three-way interaction for groups by miscue type by grapho-phonic similarity [$F(1,14) = 10.97$, $p < .01$]. This can best be understood by examining proportions presented in Figure 2. Considering substitutions first, it can be seen that the low group tended to make a greater proportion of high grapho-phonically similar substitutions than the high group. Again, this finding parallels what we have known from earlier miscue studies. When mispronunciations are considered, however, an interesting paradox comes to light. A very high proportion of the high group's mispronunciations were grapho-phonically similar to the expected response. For the low group, there was a lower proportion of grapho-phonically similar mispronunciations. One explanation for the behavior of the high group is that while they generally focus on meaning in reading, they do have good decoding skills. On those occasions where they are unable to quickly retrieve a semantically appropriate response and are thereby forced to rely on their decoding skills, they do so quite well. The behavior of the low group is explained in part as a

decoding weakness and in part as an artifact of coding. That is, as these students encounter very difficult words, their limited decoding skills don't get them far enough into the word to earn a high grapho-phonic similarity score (i.e., the reader must produce at least two of the three parts of the word to earn this high similarity rating). Poor readers are attending only to the first part of the word when they mispronounce, thus earning only a low similarity score.

Miscue Reactions

To review, the miscue reaction cluster specifies the reader's first behavior immediately following the miscue. There are six categories of reactions: continuation, repeated attempt, pause, self-correction, call for help, and no opportunity to react. So few instances of calls for help were observed that these were eliminated from analysis. Self-corrections of repetitions (a mandatory coding in the reaction cluster) were removed because they tend to artificially inflate the immediate self-correction category.

There was a statistically significant main effect for student reaction type [$F(4,56) = 10.0651$, $p < .01$]. That is, the student reaction types are not equally distributed. Specifically, continuation and no opportunity are the most frequent reaction categories, with self-corrections next, and repeated attempts and pause being the least frequent categories. There was an interaction between ability groups and reaction type ([$F(4,56) = 15.0662$, $p < .01$], indicating that the pattern of student reactions is different for low and high reading groups (Figure 3). For the high group continuations appeared most often (47% of the time) with self-corrections (24% of the time) the next most frequent. For the low group, no opportunity (52% of the time) was by far the most common reaction. What this means is that over one-half

the time the low readers were interrupted by the teacher before they were able to demonstrate any of the other types of reactions.

Figure 4 presents the data related to typical reaction patterns to omission, insertion, and substitution miscues as a function of the degree of meaning change. In examining these figures, the reader should keep in mind that the self-correction category in the reaction cluster only refers to immediate self-corrections. Delayed self-corrections where the student ultimately identifies a miscue without interruption by the teacher will be discussed in a later section dealing with the resolution of miscues. The data in this reaction cluster seem to suggest that at least the poor readers "tend" toward a similar pattern as good readers in continuing to read following miscues which affect text meaning only slightly. Unlike the good readers, however, it is very unlikely for the poor readers to continue on after a miscue which substantially affects text meaning. Whether this is a strategy they don't have, or one which the teachers will not allow them to exercise is unclear.

Teacher Verbal Feedback

In analyzing the data relative to teacher feedback, repetition miscues and all other miscues immediately self-corrected were eliminated from consideration since in these instances there was no clear opportunity for teacher feedback. Terminal feedback was the most common type of feedback found (50%), followed by no verbal feedback (35%) and then sustaining (14%). There was, however, a statistically significant interaction ($p < .01$) between high and low ability groups (Figure 5). For the high group, the most common type of feedback was no verbal feedback (73%) followed by terminal (16%), then sustaining (11%). For the low group, the most common form of feedback was terminal (64%) followed by no verbal feedback (20%), then sustaining (16%).

Figure 6 presents the type of feedback offered by teachers broken down by miscue type for the high and low ability readers. The most dramatic difference is with respect to substitution miscues where the dominant pattern for good readers is no verbal feedback (75%) while for the poor readers the dominant pattern is terminal feedback (57%).

The type of teacher feedback was then examined as a function of meaning change with insertion, omission, and substitution type miscues. A statistically significant effect ($p < .01$) was found for feedback type as a function of meaning change (Figure 6). High meaning change miscues were more likely to be responded to than low meaning change miscues in both groups. The poor readers' miscues, whether high or low meaning change, are still more likely to be given an overt response by the teacher. In addition, poor readers are still more likely to receive a terminal response over sustaining kinds of feedback.

The analysis of form of sustaining feedback did not yield any statistically significant findings. We suspect that the small number of instances of sustaining feedback overall is the primary reason for not reaching certain levels of statistical significance. The proportions for the three forms of sustaining feedback (attending, grapho-phonic, and contextual) presented in Figure 7 certainly suggest that the poorer readers are receiving more grapho-phonic cues and less attending and contextual cues than the better readers. It will take a larger data set to provide the necessary support before drawing any firm conclusions, however.

Overt verbal feedback, which includes both terminal and sustaining types, was offered to students in less than three seconds after the occurrence of a miscue over 85% of the time. There was a statistically significant interaction ($p < .01$) between ability groups and timing with the low group

more likely to receive feedback in less than three seconds than the high group. The timing of feedback was also examined relative to the degree of meaning change with insertion, omission, and substitution type miscues. A statistically significant three-way interaction ($p < .01$) was found which indicated that with the high group there was greater likelihood for feedback to be delayed with low meaning change miscues while with the low group no differences in timing for meaning change were in evidence (Figure 8).

The point at which feedback was offered was also found to be significantly related to the ability group. Overall, 94% of the overt verbal feedback was offered before the next sentence break. The pattern for the high group was quite distinct from that of the low (Figure 9). The instances of delayed feedback for the high group were generally associated with omission and insertion type miscues. An examination of point of feedback relative to meaning change revealed a statistically significant three-way interaction for reading groups similar to that found for timing (Figure 10). Wait time was apparently varied by teachers as a function of ability for the high group, but not so for the low level readers.

Miscue Resolution

The final area of analysis focussed on the resolution of the miscue, i.e., whether it was identified by the student who made the miscue, the teacher, another student, or simply left unidentified. Figure 11 presents the data for resolution of miscues by miscue type. Again, there was a statistically significant interaction for resolution by ability group. The dominant resolution patterns for the high ability group were student identification or leaving the miscue unidentified. The dominant pattern for the poor readers, with the exception of mispronunciations, was teacher identification of miscues.

Resolution was next examined as a function of the form of sustaining feedback. A statistically significant main effect was found with no interaction by ability. Attending feedback led to student identification of the miscue 85% of the time, contextual feedback almost 80% of the time, but grapho-phonic feedback only 68% of the time. Approximately 25% of the miscues given grapho-phonic feedback were ultimately identified by the teacher.

The resolution of miscues was finally examined by the degree of meaning change associated with the miscue. Here, there was a statistically significant interaction ($p < .01$) by ability group (Figure 12). The dominant patterns for the high group showed little evidence for direct teacher involvement in resolving a miscue by identifying the word for either little or substantial meaning change miscues.

Summary and Interpretation of Findings

The poorer readers in this study were found to be experiencing less teacher contact, less engaged time, and less task success than the better readers during guided oral reading. The fact that these three variables have shown up again and again in research on teaching as strong positive correlates of effective teaching, points to the serious nature of the problem facing the poor reader.

Further, there appears to be nothing redeeming for the poor reader in the quality of the interaction during guided oral reading. That is, there appear to be quite distinct patterns in teacher/pupil interactive behaviors over miscues during guided oral reading as a function of ability. Creating a composite based on the data from this study we see the good reader as one who makes mainly substitution type miscues which affect meaning only slightly and do not resemble the grapho-phonic characteristics of the text word. The good reader is most likely to continue reading in the text without interruption from the teacher and without bothering to self-correct later on. With more

difficult words, the good reader is likely to mispronounce and then immediately self-correct or make repeated attempts at the word, again, without interruption from the teacher until the word is successfully identified.

The composite for the poor reader is one of a reader who also makes primarily substitution miscues, but these do resemble the grapho-phonic features of the text word and also substantially affect text meaning. In such instances the teacher is likely to come in almost immediately or after the student has paused briefly to give the correct word. With even more difficult words the poor reader is likely to hesitate and all but wait for assistance which the teacher quickly obliges by giving the text word.

Teachers and students have apparently worked out a system which is mutually facilitative in that the behaviors of one reinforce the behaviors of the other. There is nothing in what is done by the teacher to encourage the poor reader to begin to look like the good, nor is there anything in the good reader's behavior which encourages the teacher to behave as she or he does with the poor.

The implications of this adaptive cycle for teachers are clear--the chain must be broken if the poor readers are to become like the good. Whether this involves placing the poor readers in easier practice materials so their miscue patterns resemble those of good readers, or teaching students explicit strategies for dealing with difficult words which involve such things as reading on after a miscue, or prescribing for the teacher specific patterns of feedback other than immediate terminal responses in unclear. Each of these alternatives seems worthy of extensive research.

References

Allington, R. L. Are good and poor readers taught differently? Is that why poor readers are poor readers? Paper presented at the Annual Meeting of the American Educational Research Association, Toronto, March, 1978.

Anderson, L. M.; Brophy, J. E. & Evertson, C. M. An experimental investigation of teacher feedback behaviors in first grade reading groups. Paper presented at the Annual Meeting of the American Educational Research Association, April, 1977.

Austin, M. C. & Morrison, C. The first R: The Harvard report on reading in the elementary schools. New York: McMillan, 1963.

Brady, M. & Lynch, W. Oral reading observation system: Observer's training manual. Bloomington, Indiana: Center for Innovation in Teaching the Handicapped, 1976.

Doyle, W. Making managerial decisions in the classroom. In Seventy-eighth yearbook of the National Society for the Study of Education. Part 2, Classroom Management (D. Duke, Ed.). Chicago: University of Chicago Press, 1979.

Durkin, D. Reading comprehension instruction. Reading Research Quarterly, 1978-79, 14, 481-533.

Epstein, L. and Lynch, W. An experimental test of an attentional cueing technique in aiding mildly retarded children's recall of reading vocabulary. Indiana University, Bloomington: Center for Innovation in Teaching the Handicapped, 1974.

Farr, R. & Weintraub, S. Editorial: Methodological incarceration. Reading Research Quarterly, 1974-75.

Farr, R. & Weintraub, S. Practitioners should play a role in developing new methodologies. Reading Research Quarterly, 1975-76, 11, 123-125.

Goodman, K. S. Reading a psycholinguistic guessing game. Journal of the Reading Specialist, 4 (1967), 126-135.

Goodman, Y. & Burke, C. Reading miscue inventory manual: Procedure for diagnosis and evaluation. London, England: Collier and McMillan, 1972.

Harste, J & Burke, C. A new hypothesis for reading teacher research: Both the teaching and learning of reading are theoretically based. In P. David Pearson(Ed.) Twenty-sixth yearbook of the National Reading Conference. Clemson, SC: National Reading Conference, Inc., 1977.

Hoffman, J. V. On providing feedback to reading miscues. Reading World, May, 1979, 342-350.

Hoffman, J. V. & Baker, C. Observing communication during oral reading instruction: A critique of past research and a report on the development of a taxonomy of behaviors useful in field-based research. Paper presented at the XXX International Conference on Communication: Acapulco, Mexico, 1980.

Hoffman, J.; O'Neal, S.; & Baker, C. A comparison of preservice and inservice teacher feedback strategies in a dyadic oral reading context. Paper presented at The National Reading Conference, San Diego, 1980.

Hoffman, J.; Gardner, C; & Clements, R. Feedback to oral reading miscues analysis system: Training manual. Austin, Texas: The Research and Development Center for Teacher Education, 1980.

Hoffman, J. V. & Baker, C. Characterizing teacher feedback to student miscues during oral reading instruction. The Reading Teacher. Scheduled for publication, Spring, 1981.

Howlett, N. & Weintraub, S. Instructional procedures. In R. C. Calfee & P. Drum (Eds.) An analytic study of compensatory reading programs. Newark, Delaware: International Reading Association, 1979.

McDermott, R. P. The ethnography of speaking and reading. In Roger Shuy (Ed.) Linguistic theory: What can it say about reading? Newark, Delaware: International Reading Association, 1977.

Niles, J.; Graham, R.; & Winstead, J. The effects of teacher feedback responses on children's oral reading performance. Paper presented at the National Reading Conference, Atlanta, GA, 1976.

Niles, J. Effects of teacher feedback on beginning reader's oral reading behavior. Paper presented at the Annual Meeting of the National Reading Conference, San Diego, CA, 1980.

Stallings, J. Allocated academic learning time revisited or beyond time on task. Paper presented at the Annual Meeting of the American Educational Research Association, Boston, MA, 1980.

Terry, P. R. & Cohen, D. The effect of different teacher prompting techniques on pupil success in decoding for high and low level readers during oral reading. Paper presented at the Annual Meeting of the International Reading Association, Miami, FL, 1977.

CLUSTER

I. MISCUE (THE OBSERVED RESPONSE IN RELATION TO THE EXPECTED RESPONSE)
   A. TYPE: INSERTIONS, OMISSIONS, HESITATIONS, SUBSTITUTIONS, MISPRONUNCIATIONS, CALLS FOR HELP, REPETITIONS
   B. MEANING CHANGE: LITTLE AND SUBSTANTIAL
   C. GRAPHO-PHONIC SIMILARITY: HIGH AND LOW

II. REACTION (STUDENT'S FIRST BEHAVIOR FOLLOWING THE MISCUE)
   A. TYPE: REPEATED ATTEMPT, CONTINUATION, IMMEDIATE SELF-CORRECTION, PAUSE, CALL FOR HELP, NO OPPORTUNITY

III. TEACHER VERBAL FEEDBACK (FIRST TEACHER BEHAVIOR IN RESPONSE TO A MISCUE)
   A. TYPE: NO VERBAL, TERMINAL (GIVING A TEXT WORD OR CALLING ON ANOTHER STUDENT) AND SUSTAINING (PROVIDING OPPORTUNITY OR HELPING THE STUDENT TO IDENTIFY THE TEXT WORD)
   B. FORM OF SUSTAINING: ATTENDING (NON-CUE FOCUSING), GRAPHO-PHONIC AND CONTEXTUAL
   C. TIMING OF TEACHER FEEDBACK: IMMEDIATE (LESS THAN 3 SECS) AND DELAYED (MORE THAN 3 SECS)
   D. POINT OF FEEDBACK: BEFORE THE NEXT SENTENCE BREAK, AT THE NEXT SENTENCE BREAK, OR FOLLOWING THE NEXT SENTENCE BREAK

IV. OTHER STUDENT VERBAL FEEDBACK
   A. TYPE: NONE, SOLICITED AND UNSOLICITED
   B. TIMING: IMMEDIATE (LESS THAN 3 SECS) AND DELAYED (MORE THAN 3 SECS)
   C. FORM: ATTENDING (NON-CUE FOCUSING), GRAPHO-PHONIC AND CONTEXTUAL

V. RESOLUTION
   A. TYPE: TEACHER IDENTIFIED TEXT WORD, STUDENT IDENTIFIED TEXT WORD, ANOTHER STUDENT IDENTIFIED TEXT WORD, OR MISCUE LEFT UNIDENTIFIED

FIGURE 1.

		GRAPHO-PHONIC SIMILARITY	
		High Similarity	Low Similarity
High Group	Substitutions (1.83)*	.60	.40
	Mispronunciations (.87)*	.83	.17
Low Group	Substitutions (3.82)*	.73	.27
	Mispronunciations (1.54)*	.60	.40

Figure 2.

* Mean number of miscues per 100 words of text read.

Figure 3

Typical Student Reactions to Their Own Miscues for Good Readers and Poor Readers as Defined by Reading Achievement Scores

HIGH GROUP

Insertion (9.36%)	⟶	Continue (86.5%)
	⇢	Repeated Attempt (10%)
Omission (17.09%)	⟶	Continue (69.2%)
	⇢	Self Correct (21.6%)
Substitution (41.51%)	⟶	Continue (53.9%)
	⇢	Self Correct (16.45%), Repeated Attempt (15.2%), No Oppor. (13.7%)
Mispronounce (19.27%)	⟶	Self Correct (60.1%)
	⇢	Repeated Attempt (20.3%), No Oppor. (11.1%)
Hesitate (12.77%)	⟶	No Oppor. (44.8%), Self Correct (29.3%)
	⇢	Continue (12.9%), Pause (11.64%)

LOW GROUP

Insertion (2.02%)	⟶	Continue (46.2%), No Oppor. (32.9%)
	⇢	Repeated Attempt (13.9%)
Omission (3.69%)	⟶	Continue (43.6%), No Oppor. (31.80%)
	⇢	Self Correct (19.38%)
Substitution (41.05%)	⟶	No Oppor. (40.39%), Continue (25.6%)
	⇢	Self Correct (13.6%), Pause (12.04%), Repeat (8.31%)
Mispronounce (16.18%)	⟶	No Oppor. (35.6%), Self Correct (35.6%)
	⇢	Repeated Attempt (19.02%), Continue (9.79%)
Hesitate (37.06%)	⟶	No Oppor. (73.6%)
	⇢	Pause (15.0%)

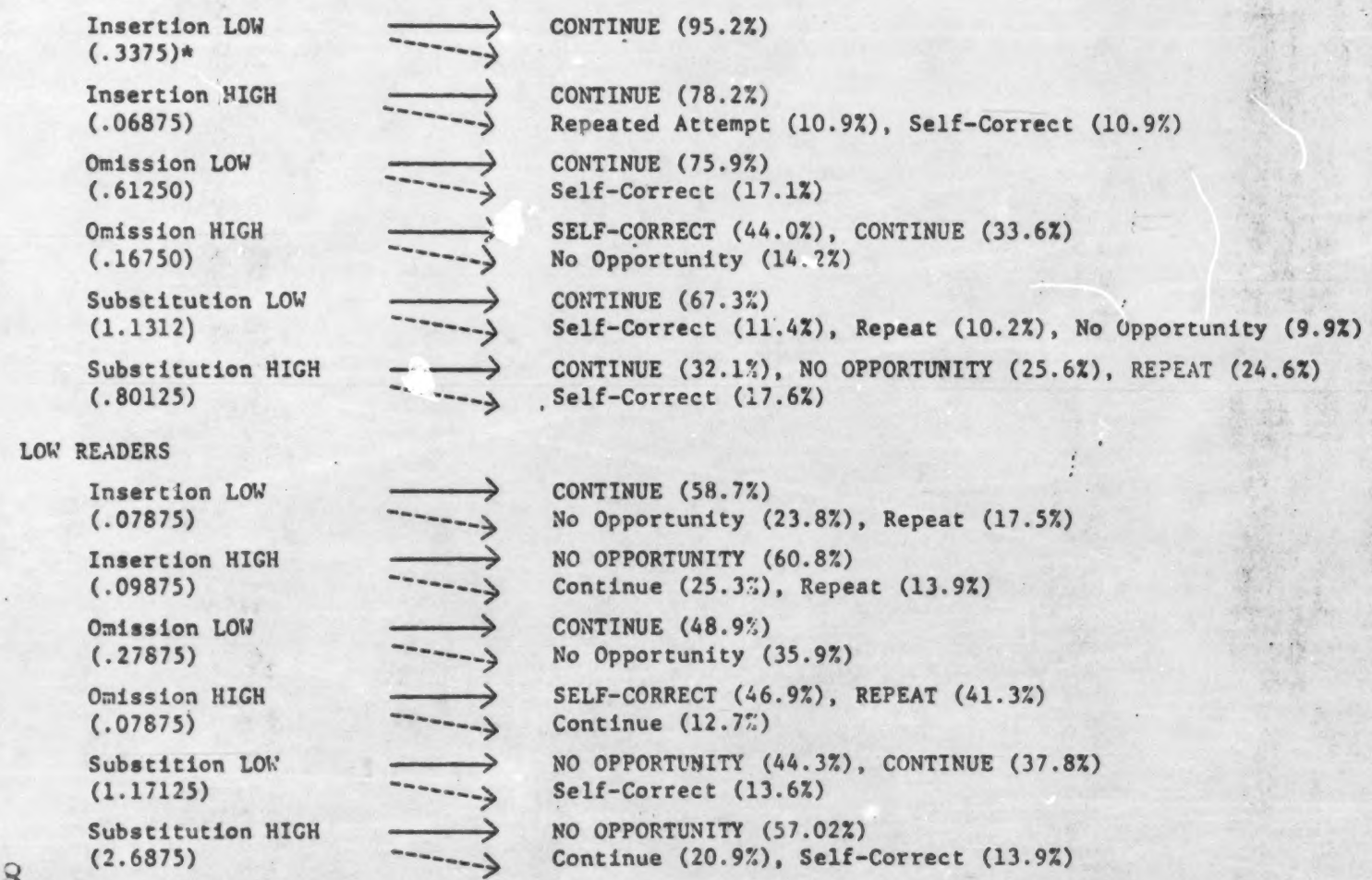
⟶ Primary Reactions

⇢ Secondary Reactions

Figure 4

Typical Reactions to High and Low Meaning Change

Miscue Separately for Good and Poor Readers



*Mean Number of Miscues/100 Words Read

Figure 5

Typical Teacher Feedback to Pupil Miscues

for Good and Poor Readers Separately

HIGH READERS

Insertions (.12879)*	→	NO FEEDBACK (99.6%)
Omissions (.2033)	→	NO FEEDBACK (87.3%)
Substitutions (.5313)	→	NO FEEDBACK (74.2%)
	→	Terminal (13.6%), Sustaining (12.2%)
Mispronunciations (.1163)	→	NO FEEDBACK (58.1%)
	→	Terminal (26.9%), Sustaining (15.1%)
Hesitations (.1388)	→	TERMINAL (42.6%), NO FEEDBACK (38.4%)
	→	Sustaining (18.9%)

LOW READERS

Insertions (.0658)	→	NO FEEDBACK (55.1%)
	→	Terminal (38.0%)
Omissions (.0971)	→	NO FEEDBACK (55.4%)
	→	Sustaining (38.2%)
Substitutions (1.155)	→	TERMINAL (56.6%)
	→	No Feedback (27.5%), Sustaining (15.9%)
Mispronunciations (.3529)	→	TERMINAL (61.7%)
	→	No Feedback (22.2%), Sustaining (15.9%)
Hesitations (1.1198)	→	TERMINAL (74.2%)
	→	Sustaining (17.4%)

*Mean Number of Miscues/100 Words Read

High Readers		
	Meaning Change	Teacher Feedback
	Low Meaning Change Miscues (.61)* ——→	NVF (85%)
	------→	Sustaining (8%)
	High Meaning Change Miscues (.23)* ——→	NVF (70%)
	------→	Terminal (17%)
Low Readers		
	Meaning Change	Teacher Feedback
	Low Meaning Change Miscues (.45)* ——→	NVF (49%)
	------→	Terminal (40%)
	High Meaning Change Miscues (.92)* ——→	Terminal (63%)
	------→	NVF (23%)

——→ Primary Reaction

------→ Secondary Reaction

* Mean number of miscues per 100 words read.

Figure 6.

	FORM OF SUSTAINING		
	Attending	Grapho-Phonic	Context
High Ability .0829*	.46	.30	.24
Low Ability .2393*	.35	.52	.13

* Miscues per 100 words read

Figure 7

		TIMING	
		Less than 3 seconds	Greater than 3 seconds
High Readers			
	Little Meaning Change (.1304)*	.93	.07
	Substantial Meaning Change (.0725)*	.84	.16
Low Readers			
	Little Meaning Change (.2333)*	.97	.03
	Substantial Meaning Change (.6296)*	.95	.05

* Miscues per 100 words read.

Figure 8.

	POINT OF FEEDBACK		
	Before the Next Sentence Break	At the Next Sentence Break	Following the Next Sentence Break
High Ability (.138)*	.81	.13	.06
Low Ability (1.09)*	.96	.04	.00

* Miscues per 100 words read.

Figure 9.

		POINT OF FEEDBACK		
		Before the Next Sentence Break	At the Next Sentence Break	Following the Next Sentence Break
High Ability				
	Little Meaning Change (.0787)*	.60	.30	.10
	Substantial Meaning Change (.0716)*	.83	.17	.00
Low Ability				
	Little Meaning Change (.2316)*	.95	.05	.00
	Substantial Meaning Change (.6295)*	.93	.07	.00

* Miscues per 100 words read.

Figure 10.

Figure 11

Typical Resolutions to Pupil Miscues

for Good and Poor Readers Separately

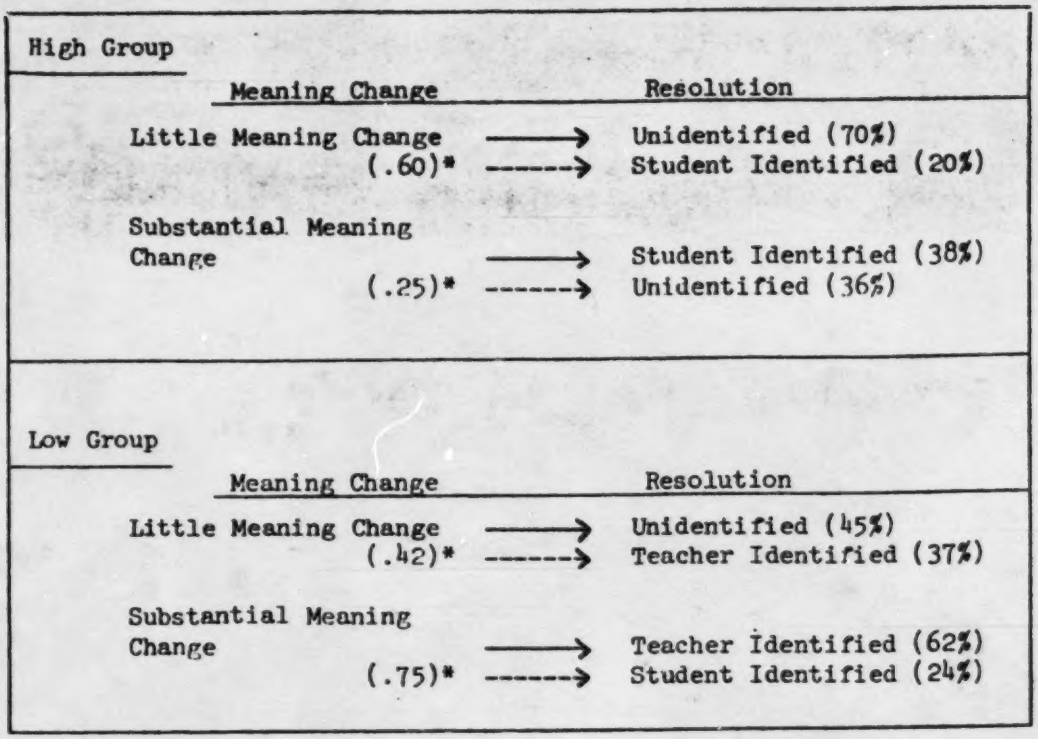
HIGH READERS

Insertions (.10625)*	UNIDENTIFIED (78.2%) Student (21.8%)
Omissions (.20156)	UNIDENTIFIED (55.2%) Student (35.0%)
Substitutions (.47375)	UNIDENTIFIED (42.7%), STUDENT (42.2%) Teacher (11.7%)
Mispronunciations (.21844)	STUDENT (75.5%) Teacher (12.4%)
Hesitations (.11062)	STUDENT (48.3%), TEACHER (40.1%) Other (11.6%)

LOW READERS

Insertions (.049375)	TEACHER (38.0%), UNIDENTIFIED (34.2%), STUDENT (27.8%)
Omissions (.09)	UNIDENTIFIED (39.6%), TEACHER (30.9%), STUDENT (29.5%)
Substitutions (1.0041)	TEACHER (52.7%) Student (28.15%), Unidentified (17.6%)
Mispronunciations (.40094)	STUDENT (50.6%), TEACHER (41.9%)
Hesitations (.91156)	TEACHER (75.0%) Student (21.7%)

*Mean Number of Miscues/100 Words Read



——→ Dominant pattern

------→ Secondary pattern

* Mean number of miscues per 100 words read.

Figure 12.